

INTRODUCTION

"Despite the unprecedented explosion in scientific knowledge and the phenomenal capacity of medicine to diagnose, treat and cure disease, Blacks and other minorities have not benefited fully or equitably from the fruits of science or from those systems responsible for translating and using health sciences technology." "Persistent and significant health disparities exist for minority Americans, requiring efforts of monumental proportions to bring their health to the level of all Americans." These findings are articulated in REPORT OF THE SECRETARY'S TASK FORCE ON BLACK AND MINORITY HEALTH which documents the continuing disparities in key health indicators among certain groups of the U.S. population. (1)

As evidenced by recent inquiries to the State Center for Health Statistics about the health status of minority North Carolinians, the Report has raised concern about racial disparities in this state. One quick measure which is suggestive of significant disparities in North Carolina is life expectancy, a measure which summarizes the overall differences in the level of mortality among various groups. Minority females born in 1980 had a life expectancy at birth 5.1 years less than that for white females. In 1940 the difference was 10.9 years. Minority males had a life expectancy at birth 6.3 years less than that for white males in 1980, but 8.8 years less in 1940. While improvements have been made, minorities of both sexes still have life expectancies that were reached by whites prior to the mid-1950's, a lag of about 30 years.

The lags in life expectancy raise questions about the health of minorities relative to whites. Specifically, to what extent are there disparities in health between whites and minorities, what have been the trends in those disparities in the past decade, and what are the specific problems and conditions for which the greatest disparities exist? These and other questions are examined in this paper through a comparative analysis of key statistical indicators of the health of minority and white North Carolinians.

METHODS

The method of study is descriptive using statistical indicators on pregnancy, morbidity, and mortality for North Carolina residents. The primary objective of this study is to measure the racial gaps in these indicators and the trends in those gaps in the recent past. The ratio of the minority-to-white rates or proportions was used as the index of disparity or gap. A ratio greater than 1.0 indicates that the rate is higher for minority North Carolinians than for whites; a value of less than 1.0 indicates that minorities have a lower rate than whites. The change in this ratio over time indicates whether or not the gap has widened or narrowed.

For the mortality data, race-sex-specific mortality rates age-adjusted by the direct method were used to calculate the ratio. A ratio comparison of two age-adjusted rates is called a risk ratio or relative risk (2). A high relative risk for a specific cause of death may not be of great "public health significance" if the cause affects a small number of people. For some causes by race-sex group, small numbers result in an unstable rate if 1-year numbers are used. To minimize this potential problem, only 5-year numbers are used to calculate the age-adjusted rates. Ratios based on less than 20 events are marked by an asterisk in a table.

Race ratios were calculated using all deaths (RR) and all deaths prior to age 45 (RRY). The latter ratios were used to assess risk differentials for younger minorities versus younger whites. Ratios were calculated for total deaths and specific causes.

SOCIAL AND ECONOMIC CHARACTERISTICS OF MINORITIES

One of the most enduring of relationships has been the association between socioeconomic status and health status. Whether socioeconomic status is measured by education, income, occupation, or a composite index, and whether health status is measured by mortality, morbidity, or perceived health status, higher socioeconomic status has repeatedly been shown to be associated with better health status (3-6).

The 1980 Census indicates that one out of every four persons in North Carolina is a member of a minority group, for a total of approximately 1.4 million persons. Blacks constitute the largest minority group (about 22% of the total population), with American Indians a distant second (1%). The large black population makes North Carolina one of only 5 states in which blacks constitute more than one-fifth of the population. Only 6 states had a higher number of blacks in 1980. Furthermore, a large Indian population ranks the state fifth in the number of native Americans (7).

Between 1970 and 1980 the number of minorities recorded by the Census increased by 20% while the number of whites increased by 14%. This pattern of more rapid growth for minorities is expected to continue to the year 2000. Minorities are projected to increase to 1,715,600 (26.4% of the total population) by 1990 and to 1,954,600 (27.9%) by the turn of the century.

In addition to growing faster, minority North Carolinians are on the average younger than whites. The median age of blacks in 1980 was 24.7 years and for Indians, 23.1 years (Table 1). Whites on the other hand were about 7 years older than either group. While the median age has increased for both whites and blacks, the age disparity has actually widened at each census year since 1920, with the exception of between 1970 and 1980 when the gap declined from 7.0 to 6.7 years. Blacks now have a median age reached by whites in the 1940's.